**Science 8 - Project**

**Purpose**:

1. Apply knowledge of fluids and “Particle Theory”
2. Use unit vocabulary correctly.
3. Demonstrate knowledge of fluid use in hydraulics machines and pneumatic machines.

**Products**:

1. Research Notes – 25 %
2. Video – Particle Theory - 50 %
3. Glossary – 25%

**Assessment:**

1. **Research** – 25 % (5pts. for each question/answer)

* Complete answer (4pts. each)
* quality/clarity (1pts. each)

Post the following questions and answers to the questions on wiki.

1. Define hydraulic.
2. Define pneumatic.
3. What are 4 hydraulic devices?
4. What are 4 pneumatic devices?
5. How do hydraulic systems work?
6. How do pneumatic systems work?
7. What are the major differences between hydraulic and pneumatic

systems?

1. **Power Point** – Pneumatics & Hydraulics - 50 % -

* Quality – Clarity, spelling/grammar, overall presentation (10%)
* Content – Pneumatic 25 %/Hydraulic 25 % (40%)

1. **Glossary** – 25 %

* Complete definitions for each of the following words. (4 pts. /word)
* Quality/neatness (1 pt./ word)

**Vocabulary**

liquid pressure area force

valves transport Pascal kilopascal

compressor decompresses compressibility flow pressure

static pressuresystem gas

**Research**

**(Remember to cite sources – books & websites)**

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**Glossary**

|  |  |  |
| --- | --- | --- |
| **Term** | **Definition** | **Drawing or example (if needed)** |
| **liquid** |  |  |
| **pressure** |  |  |
| **area** |  |  |
| **force** |  |  |
| **valves** |  |  |
| **transport** |  |  |
| **Pascal** |  |  |
| **kilopascal** |  |  |

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**Glossary**

|  |  |  |
| --- | --- | --- |
| **Term** | **Definition** | **Drawing or example (if needed)** |
| **compressor** |  |  |
| **decompresses** |  |  |
| **compressibility** |  |  |
| **flow pressure** |  |  |
| **static pressure** |  |  |
| **system** |  |  |
| **gas** |  |  |

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